

IN THE CLAIMS:

1. (currently amended) A multi-layer sensor through which an optical wave guide (18, 42, 60) is passed, the optical wave guide (18, 42, 60) defining a structure (52, 82, 104) in which the optical wave guide (18, 42, 60) is contained, the structure (52, 82, 104) having a front layer (54, 84, 106) and a rear layer (56, 86) which transmits an external application of force directly onto the optical wave guide (18, 42, 60), the structure further including clips (34, 102) for retaining the optical wave guide (18, 42, 60) in a curved path and ribs (38, 62, 88) for retaining the optical wave guide (18, 42, 60) in a single plane which serve to guide the optical wave guide (18, 42, 60).

2. (previously amended) A multi-layer sensor according to claim 1, wherein the optical wave guide (18, 42, 60) is arranged such that the optical wave guide (18, 42, 60) is bent by the external application of force.

3. (Original) A multi-layer sensor according to claim 1, wherein the optical wave guide (18, 42, 60) is arranged such that it is deformed by the external application of force.

4. (Cancelled).

5. (Cancelled).

6. (previously amended) A multi-layer sensor according to claim 3, wherein the front and rear layers (54, 56, 84, 86, 106) are joined together by an adhesive layer (70, 108).

7. (previously amended) A multi-layer sensor according to claim 6, wherein the adhesive layer (70, 108) is applied only in region of edges of the front and rear layers (54, 56, 84, 86, 106).

8. (previously amended) A multi-layer sensor according to claim 7, having a first layer (12) through which an optical wave guide (18, 42, 60) is passed and a second layer (14, 32)

which abuts on the first layer (12), the first layer (12) having greater compressibility than the second layer (14, 32).

9. (Original) A multi-layer sensor according to claim 8, wherein a third layer (16, 30, 40) is provided which has lower compressibility than the first layer (12) and which is arranged such that the first layer (12) is disposed between the second layer (14, 32) and the third layer (16, 30, 40).

10. (Original) A multi-layer sensor according to claim 9, wherein the optical wave guide (18, 42, 60) is passed through the sensor (10, 50, 80, 100) at least twice.

11. (Original) A multi-layer sensor according to claim 10, wherein the optical wave guide (18, 42, 60) is passed through the sensor in a wave-like configuration.